

		National Defence Défense Nationale		
DATA ITEM DESCRIPTION - DESCRIPTION DE DONNÉES				
1. TITLE – TITRE		2. IDENTIFICATION NUMBER - NUMÉRO D'IDENTIFICATION		
AVAILABILITY REPORT		DID 6.6.1		
3. DESCRIPTION / PURPOSE – DESCRIPTION / OBJET				
<p>The purpose of the Availability Report is to advise the NWSO TA of PME status changes from serviceable to Non-Mission Capable (Red Status).</p>				
4. APPROVAL DATE DATE D'APPROBATION	5. OFFICE OF PRIMARY INTEREST (OPI) BUREAU DE PREMIERE RESPONSABILITÉ (BPR)		6. GIDEP APPLICABLE D'ÉCHANGE DE DONNÉES PERTINENT	
September 2020	NWSO Technical Authority (TA)			
7. APPLICATION / INTERRELATIONSHIP – APPLICATION / INTERDÉPENDANCE				
<p>CDRL 6.6.1 and SOW paragraph 6.6.1 refer. This DID contains the format and content preparation instructions for the data generated under the work tasks described in the NWS O&M SOW.</p>				
8. ORIGINATOR - AUTEUR		9. APPLICABLE FORMS - FORMULES PERTINENTES		
NWSO TA				
10. PREPARATION INSTRUCTIONS – INSTRUCTIONS SUR LA PRÉSENTATION DES DONNÉES				
<p>10.1 <u>Source Document</u> NWS O&M SOW Section 6, paragraph 6.6.1.</p> <p>10.2 <u>Content and Format</u></p> <p>10.2.1 The Contractor shall provide useable radar (LRR primary and secondary, and SRR) and G/A/G radio signals between NWS sites and the Canadian Air Defence Sector demarcation point (Central Distribution Frame) 96% of the time on a daily, weekly, monthly, quarterly and yearly basis for each site.</p> <p>10.2.2 The Contractor shall record all PME downtime in equipment status fields of Work Orders. This portion of applicable Work Orders constitutes Equipment Status Reports (ESRs), which will be the basis of operational availability calculations. DID 5F3 lists the ESR fields required for PME downtime reporting.</p> <p>10.2.3 The Availability Report shall contain a PME G/A/G section and a PME RADAR section, each section is to contain an overview sheet with: Site Type, Name, % Availability, Operational Availability, Data Quality, Availability Ratio, Total Mins down, Total Hours. As well, the Report shall contain a detailed report with all RED time attributable to PME availability figures, including Site Type, Name, ESR Number, Equipment, System Status, Channel Status, Downtime Codes, Delay Codes, Mins, Hrs, and whether the time is accountable or not.</p>				

10.2.4 The Contractor shall use the following calculation formula:

**DATA AVAILABILITY RATE
CALCULATION**

$$\text{Availability Rate (\%)} = \left(\frac{\text{Hours Possessed} - \text{Chargeable Downtime}}{\text{Hours Possessed}} \right) \times 100$$

Where: Hours Possessed = Total hours in the reporting period including all downtime (Excusable Downtime + other). In the case of monthly reporting this is expressed as beginning the first day of the month at 00:00 and stopping on the first of the next month at 00:00. In the case of daily reporting this is expressed as beginning the first hour of the day at 00:00 and stopping on the first hour of the next day at 00:00. Quarterly and yearly reporting follow the same pattern.

Chargeable Downtime = Total Downtime minus Excusable Downtime

Excusable Downtime = Downtime attributable to:

- (1) Military priority downtime;
- (2) Corrective Maintenance procurement delays directly attributable to the Government;
- (3) Government-furnished airlift limitations that are not the result of scheduling issues on the part of the Contractor.

NOTE: Discretionary use of airlift by the Contractor that results in airlift conflicts (and potential unavailability of airlift) is not considered excusable. Examples include, but are not limited to: no technician available, other zone priorities or Contractor decisions that result in placing limitations on the use of Government furnished airlift;

- (4) Problems with equipment for which the Contractor has no maintenance responsibility, including transponder outages, BCS-F issues, and power outages in the David L. Pitcher Building (Aboveground Complex) at 22 Wing North Bay;
- (5) Design features of radar equipment over which the Contractor has no control, including equipment shutdown due to excessively high outside temperatures related to the AN/FPS-124 and AN/FPS-117 radars and radar equipment cold soak recovery exceeding six (6) hours;

NOTE: Cold soak recovery time relates to a Red Status (non-mission capable) radar. Other system failures such as hydrocarbon sniffers, fire alarm panel issues may cause a radar to become non-mission capable and be out of contractor control, however, systems such as DEGs which are triple redundant are considered within contractor control and would not generate excusable delay.

- (6) Special scheduled maintenance approved by the NWS TA;

- (7) Modifications and projects approved by the NWS TA;
- (8) Scheduled downtime required by NWSO or NWSO-sponsored personnel which necessitates the removal of radar radiation hazards, including radome maintenance;
- (9) AN/FPS-117 training at FOX-M for scheduled courses; and
- (10) Awaiting the next site visit for FPS-124 outages, understanding that the SOW states that the Contractor ensures that restoral for interruption of SRR data occurs at the next opportunity for a site visit not to exceed 30 calendar days of interruption.

10.2.5 The contractor shall use the following calculation formula:

OPERATIONAL AVAILABILITY CALCULATION

$$(A_o) (\%) = \left[\frac{(\text{Hours Possessed} - \text{Total Downtime})}{\text{Hours Possessed}} * (Q_D) \right] * 100\%$$

Where:

Q_D is Data Quality as determined by 22 Wing and expressed as $Q_D = (Q_U * Q_A)$

Q_U is Usable Data expressed as either 0 for Red data (unusable), or 1 for Amber or Green data (somewhat usable or completely usable)

Q_A is Available Data expressed as either 0 for data is unavailable at 22 Wing or 1 for data is available

Q_D can only be 0 or 1

Total Downtime = Chargeable Downtime plus Excusable Downtime

10.2.6 Contractor performance will be measured against Availability Rate, however, it is understood that 22 Wing is most likely more interested in A_O and the percent difference between contractual availability (the Availability Rate) and whether the system is operationally usable.

10.2.7 The contractor shall use the following calculation.

AVAILABILITY RATIO

$$A_R = \frac{(A_{CR} - A_O)}{\left[\frac{A_{CR} + A_O}{2} \right]} * 100\%$$

Where:

A_{CR} is the Availability Rate described above

10.2.8 The Availability Report shall be prepared and delivered in Contractor format. The Availability Report shall be completed in cooperation with the SM Section.